

REMARKS

Status of the Claims

Claims 1-13, 17-22, 24-29 and 31-35 are pending. By way of the present amendment, Applicants are resubmitting appropriately amended claims, in place of the Amendment previously filed on September 12, 2001.

No new matter has been added

Applicants submit that no new matter has been added by way of the present amendments. For example, claims 1, 7 and 17 have been amended to recite the average grain size of the fine grains in the prepared solid dispersion as being "0.01  $\mu\text{m}$  to 1  $\mu\text{m}$ ". Support for this amendment is found in the present specification at page 87, lines 9-12. Claims 14, 15, 16, 23 and 30 have been cancelled and new claims 31-35 have been added. New claim 31 is supported by the present specification at page 52, lines 8-10. New claim 32 is supported by the present specification at page 8, lines 19-24. New claim 33 is supported by the present specification at page 52, lines 20-25. New claim 34 is supported by the present specification at page 53, lines 1-2. Lastly, new claim 35 is supported by the present specification at page 56, lines 3-5. Accordingly, no new matter has been added.

A version with markings to show changes made is attached hereto.

No new issues have been raised

Applicants further submit that no new issues have been raised which require additional search and/or consideration on the part of the Examiner. For example, by limiting the prepared solid dispersion grains to the recited size, the application is placed into condition for allowance, thus removing issues. New claims 31-35 merely further limit the subject matter of claims 1 and 7. Moreover, these amendments are being made to comply with the Examiner's suggestions made during the Interview dated May 11, 2001. Regardless, in the event that the present amendment does not place the application into condition for allowance, entry thereof is requested as placing the application into better condition for appeal.

In view of the following remarks Applicants respectfully request that the Examiner withdraw all rejections and allow the currently pending claims.

Issues Under 35 U.S.C. § 102(b)/103(a)

The Examiner has rejected claims 7-12, 17-21, and 24-[2]8 under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over Czekai et al., USP 5,500,331 (Czekai '331) or Czekai et al., USP 5,478,705 (Czekai '705).

The Examiner has also rejected claims 13-16, 22, 23, 29 and

30 under 35 U.S.C. § 103(a) as being obvious over Czekai '331 and Czekai '705 in view of Lobo et al., USP 5,589,322.

The Examiner has also rejected claims 12, 21 and 28 under 35 U.S.C. § 103(a) as being obvious over Czekai '331 and Czekai '705 in view of Scaringe et al., USP 5,750,323.

Lastly, the Examiner has rejected claims 1-6 under 35 U.S.C. § 103(a) as being obvious over Czekai '705 combined with Canepa et al., USP 4,620,673 (hereafter referred to as Canepa '673), Bishop, USP 5,474,237 (hereinafter referred to as Bishop '237) or Inkyo et al., USP 5,882,246 (hereinafter referred to as Inkyo '246).

Applicants respectfully traverse each of the above rejections.

#### **Czekai '331 and Czekai '705**

The primary references utilized by the Examiner are the Czekai '331 and/or Czekai '705 references. Applicants respectfully submit that significant patentable distinctions exists between the present invention and these primary references. That is, Czekai '331 and Czekai '705 disclose media which are different from the media currently claimed.

First, as already argued in the Declaration pursuant to 37 C.F.R. § 1.132 filed on December 21, 2000, Table 1 makes evident that the average grain size of the dispersions of Czekai '331 and

Czekai '705 is 2  $\mu\text{m}$ , whereas that of the present invention is exhibited as 0.29  $\mu\text{m}$ . Present claims 1, 7, and 17 specifically recite that the average grain size is "0.01  $\mu\text{m}$  to 1  $\mu\text{m}$ ". Thus, the average grain size of the present invention is neither suggested nor disclosed by the primary references of Czekai '331 and Czekai '705.

Second, as previously argued, Czekai '331 and Czekai '705 fail to disclose or suggest a media having a bulk density of 4.0 g/cm<sup>3</sup> or more. In contrast, the present claims require that the bulk density of the media be 4.0 g/cm<sup>3</sup> or more.

Third, Czekai '705 employs a media in the working examples utilizes polystyrene. However, the Vicker's hardness of polystyrene is about 20 MPa at the most. In stark contrast, the present claims require a Vicker's hardness of 10 GPa or more, thus, the Vicker's hardness disclosed by the prior art is 1/500<sup>th</sup> of the Vicker's hardness required by the present claims. Applicants have submitted evidence to this regard in the December 21, 2000 amendment which is herein incorporated by reference.

Accordingly, the prior art fails as a whole to disclose or suggest the specific properties of the media according to the present invention. This results in a failure of the prior art to recognize the unexpectedly superior properties according to the present invention. For instance, as outlined in the Declaration submitted on December 21, 2000, the specific properties of the

media according to the present invention result in unexpectedly superior average residence time compared to that of the Czekai '331 and Czekai '705 references. In this regard, the Examiner is again requested to consult the results in Example 1 of the present specification as well as the Declaration. For instance, the average residence times to obtain dispersion samples S-1 to S-7 (employing the media according to the present invention) were about 20 minutes. In contrast, the average residence times to obtain dispersion samples S-19 and S-20 (employing the comparative media) were about 800 minutes. This constitutes a difference of a magnitude of 40 between the present invention and the primary references. Thus, the present invention achieves an unexpectedly superior average residence time.

As already discussed above, Applicants respectfully request the Examiner give strength to the fact that the average grain size of the dispersion in the comparative samples S-19 and S-20 were much larger (about 2 micrometers) than those in samples S-1 to S-7) 0.08 to 0.29 micrometers.

In summary, the primary reference of Czekai '331 and Czekai '705 fail to suggest or disclose the currently claimed subject matter. Thus, there exists no anticipation nor any *prima facie* case of obviousness based upon these references. Applicants further point out that even if the secondary references cited by the Examiner are combined with the primary references, the present claims still encompass subject matter which is non-obvious.

Moreover, even if, *arguendo* the Examiner has hypothetically established a *prima facie* case of obviousness based upon the references cited, Applicants respectfully submit that the unexpected results as discussed above rebut any hypothetical *prima facie* case of obviousness. Accordingly, the Examiner is respectfully withdraw these rejections and allow the currently pending claims.

If the Examiner has any questions or comments, please contact Craig A. McRobbie, Reg. No. 42,874, at the Offices of Birch, Stewart, Kolasch & Birch, LLP.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

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Attachment: Version with Markings to Show Changes Made

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

Claims 14, 15, 16, 23 and 30 were cancelled.

The claims were amended as follows:

1. (Amended) A method of preparing a photographic solid fine-grain dispersion, the method comprising the steps of:

successively bringing a slurry of a water-insoluble photographically useful compound in a grinding chamber of a dispersing machine, which chamber is filled with media,

allowing the compound to contact the media in the grinding chamber, to produce fine grains of the compound successively,

successively separating the media from the compound by centrifugal force, and

taking the compound out of the grinding chamber,

wherein the bulk density of the media is  $4.0 \text{ g/cm}^3$  or more, the Vickers hardness thereof is 10 GPa or more, the breaking tenacity thereof is  $5 \text{ MPa}\cdot\text{m}^{1/2}$  or more, and the average grain size thereof is 0.3 mm or less, and

wherein the fine grains in the solid dispersion prepared have an average grain size of  $0.01 \text{ }\mu\text{m}$  to  $1 \text{ }\mu\text{m}$ .

7. (Amended) A photographic solid fine-grain dispersion, which is obtained by a preparation method comprising the steps of:

successively bringing a slurry of a water-insoluble photographically useful compound in a grinding chamber of a dispersing machine, which chamber is filled with media,

allowing the compound to contact the media in the grinding chamber, to produce fine grains of the compound successively,

successively separating the media from the compound by centrifugal force, and

taking the compound out of the grinding chamber,

wherein the bulk density of the media is  $4.0 \text{ g/cm}^3$  or more, the Vickers hardness thereof is 10 GPa or more, the breaking tenacity thereof is  $5 \text{ MPa}\cdot\text{m}^{1/2}$  or more, and the average grain size thereof is 0.3 mm or less, and

wherein the fine grains in the solid dispersion prepared have an average grain size of  $0.01 \text{ }\mu\text{m}$  to  $1 \text{ }\mu\text{m}$ .

17. (Amended) A coating composition for a silver halide photographic light-sensitive material, which composition comprises a photographic solid fine-grain dispersion that is obtained by a preparation method comprising the steps of:

successively bringing a slurry of a water-insoluble photographically useful compound in a grinding chamber of a dispersing machine, which chamber is filled with media,

allowing the compound to contact the media in the grinding chamber, to produce fine grains of the compound successively,



successively separating the media from the compound by centrifugal force, and

taking the compound out of the grinding chamber,

wherein the bulk density of the media is  $4.0 \text{ g/cm}^3$  or more, the Vickers hardness thereof is 10 GPa or more, the breaking tenacity thereof is  $5 \text{ MPa}\cdot\text{m}^{1/2}$  or more, and the average grain size thereof is 0.3 mm or less, and

wherein the fine grains in the solid dispersion prepared have an average grain size of  $0.01 \text{ }\mu\text{m}$  to  $1 \text{ }\mu\text{m}$ .

New claims 31-35 were added.